

Serial No. 10/802,721

Attorney Docket No. 01-581

REMARKS

Claims 2-4 and 6 are pending. Claims 1 and 5 have been canceled. The applicant respectfully requests reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claims 2-4 and 5 were rejected under 35 USC 103(a) as being unpatentable over Sakai *et al.* in view of Peterson *et al.* Claim 5 has been canceled and will not be discussed. As for claims 2-4, the applicant respectfully requests that this rejection be withdrawn for the following reasons.

Claim 4 recites etching a main surface side of the silicon substrate, and claim 4 now recites that the main surface has a (110) surface. In claim 4, the etching of the main surface side of the silicon substrate includes maintaining a KOH concentration of the potassium hydroxide solution in a range of 39-48 weight percent and also maintaining the solution temperature of the potassium hydroxide solution in a range of 90-140 degrees Celsius.

The Sakai *et al.* reference only discloses the etching of the main surface side of the silicon substrate in a KOH solution at a concentration of 33 wt% (see column 4, lines 44-48) and fails to disclose any other range of KOH concentration. Thus, Sakai *et al.* fails to disclose or suggest the concentration set forth in claim 4.

The Peterson *et al.* reference discloses etching of the silicon substrate (the silicon layer) in a KOH solution at a concentration of 10-45 wt% and within a temperature range of 50-100 degrees Centigrade (see page 2, paragraph number 0042). The Peterson *et al.* reference merely discloses etching of the silicon substrate and fails to disclose or suggest etching the main surface side of the silicon substrate, at which a (110) surface is present. Thus, the KOH concentration and the temperature of the potassium hydroxide solution of the Peterson *et al.* reference are

Serial No. 10/802,721

Attorney Docket No. 01-581

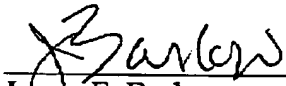
merely intended for etching of a silicon substrate and are not intended for etching a main surface side of a silicon substrate, at which a (110) surface is present. Therefore, there is no reason or motivation to use the KOH solution of the Peterson *et al.* reference at the KOH concentration of 10-45 wt% and the temperature of 50 to 100 degrees Centigrade in the etching process of the Sakai *et al.* reference.

Furthermore, the claimed combination of the KOH concentration of the potassium hydroxide solution in the range of 39-48 weight percent and the solution temperature of the potassium hydroxide solution in the range of 90-140 degrees Celsius used in the etching of the main surface side of the silicon substrate, at which the (110) surface is present, was found through extensive experimentation by the applicant and would not have been obvious from the teachings of the Peterson *et al.* reference. Thus, claim 4 should be patentable over the combination of Sakai *et al.* and Peterson *et al.*

In view of the foregoing, the applicant submits that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

If there are any problems with the payment of fees, please charge any underpayments and credit any overpayments to Deposit Account No. 50-1147.

Respectfully submitted,


James E. Barlow
Reg. No. 32,377

Posz Law Group, PLC
12040 South Lakes Drive, Suite 101
Reston, VA 20191
Phone 703-707-9110
Fax 703-707-9112
Customer No. 23400